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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/928,294 | 08/10/2001 | Robert M. Best | 493-27-3 | 8277 |

996 7590 04/17/2007
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| EXAMINER |
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BANTA, TRAVIS R

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3714

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|----------------------------------------|------------|---------------|
| 3 MONTHS | 04/17/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/928,294

Applicant(s)

BEST, ROBERT M.

Examiner

Travis R. Banta

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 352-374 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 352-374 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims **352, 366, 371, and 373** are rejected under 35 U.S.C. 112 first paragraph. Claims 352, 366, 371, and 373 recite the term "which are capable of processing". This term is not positively recited. The Examiner suggests the claims be amended to read "which process".

Claim Rejections- 35 USC § 103

The Examiner will present herein that three dimensional rendering using polygons in a hand held gaming device with a self contained electric power source is *prima facie* obvious as a natural progression in the art. That is to say, one of ordinary skill in the art would reasonably expect three dimensional rendering of polygons in a hand held device to come about as processing power improved and losses of power were minimized. If the applicant can produce evidence that this case is not an obvious progression of the art, to the Examiner's satisfaction, the rejections made herein will be withdrawn.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **352, 355, 358-362, 364, 366-367, 371-373** are rejected under 35 U.S.C. 103(a) as obvious in view of the PSone portable (see <http://www.answers.com/topic/playstation-1> cited in the previous action).

Regarding claim 352, the PSone is an independently operable handheld gaming system. The housing of the PSone is of suitable size and weight for hand held use. A controller is provided (see picture) as manually operated input. The PSone contains a processor in the housing that executes a game program to generate 3D graphical rendering and polygon vertex data to represent a character or object in the game in response to manual input. The processor in the PSone digitally renders displayable pixel data from the polygon vertex data from a variable viewing angle. A display is provided. The PSone fails to disclose a self contained electrical power supply. One of ordinary skill in the art would recognize that a self contained power supply is necessary for portable game playing. The PSone suggests to one of ordinary skill in the art a portability in game systems, though correctly pointed out by the applicant, in a car due to increased power availability thereby facilitating processing power necessary for 3D graphics and polygonal rendering. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to incorporate a self contained power supply into the PSone to make the game fully and completely portable to a player.

Regarding claim 355, the PSone inherently contains operation detecting circuitry on the display device that detects location coordinates on the display device. The circuitry must necessarily provide location coordinates to the processor in response input so the game can track the player's input correctly. The PSone further contains a

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processor for generating successive images of areas in the game space in response to the manual operation and manipulation of the location of the input.

Regarding claim 358, the PSone displays a player controlled object that is rendered from different viewpoints in the game space from which the player controlled object is displayed on the display screen.

Regarding claim 359, the PSone renders pixel data that represents a player controlled object from a variable 3 dimensional viewing angle controlled by the player via the control device.

Regarding claim 360, the PSone display is an LCD.

Regarding claims 361 and 362, the PSone contains a processor and a graphics processor. It is well known to one of ordinary skill in the art that a single processor is able to process game data and graphics data though intense data is better processed using a graphics co-processor. However, it would be obvious to one of ordinary skill in the art at the time of the invention to incorporate a single processor to process game data and graphics data to reduce manufacturing costs and costs to the consumer.

Regarding claim 364, the PSone discloses a player controlled object in a three dimensional game space. The PSone does not disclose the ability to show a grasping hand also controlled by a player to move in concert with the first object in response to player input. The representation of a hand is deemed to be a matter of obvious design choice. One of ordinary skill in the art would recognize that manipulating a second object would allow a player to play a game using more than one character at a time. It would therefore be obvious to one of ordinary skill in the art to incorporate the ability to

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control 2 or more objects to correspond to game storyline needs, or allow the player to play a game needing more than one player (a sports game for example).

Regarding claim 366, the PSone teaches a method of independently operating a handheld gaming system. The housing of the PSone is of suitable size and weight for hand held use. A controller is provided (see picture) as manually operated input. The PSone contains a processor in the housing that executes a game program to generate 3D graphical rendering and polygon vertex data to represent a character or object in the game in response to manual input. The processor in the PSone digitally renders displayable pixel data from the polygon vertex data from a variable viewing angle. A display is provided. The PSone fails to disclose a self contained electrical power supply. One of ordinary skill in the art would recognize that a self contained power supply is necessary for portable game playing. The PSone suggests to one of ordinary skill in the art a portability in game systems, though correctly pointed out by the applicant, in a car due to increased power availability thereby facilitating processing power necessary for 3D graphics and polygonal rendering. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to incorporate a self contained power supply into the PSone to make the game fully and completely portable to a player.

Regarding claim 367, the PSone teaches a player controlled object is generated in variable directions in game space in response to corresponding motion to that supplied by player input.

Regarding claim 371, the PSone teaches a data storage medium encoded in an independently operable handheld gaming system. The housing of the PSone is of suitable size and weight for hand held use. A controller is provided (see picture) as manually operated input. The PSone contains a processor in the housing that executes a game program to generate 3D graphical rendering and polygon vertex data to represent a character or object in the game in response to manual input. The processor in the PSone digitally renders displayable pixel data from the polygon vertex data from a variable viewing angle. A display is provided. The PSone fails to disclose a self contained electrical power supply. One of ordinary skill in the art would recognize that a self contained power supply is necessary for portable game playing. The PSone suggests to one of ordinary skill in the art a portability in game systems, though correctly pointed out by the applicant, in a car due to increased power availability thereby facilitating processing power necessary for 3D graphics and polygonal rendering. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to incorporate a self contained power supply into the PSone to make the game fully and completely portable to a player.

Regarding claim 372, the PSone is disclosed to have memory stick memory. This is well known to be a semiconductor memory. The PSone also uses an optically encoded disc.

Regarding claim 373, the PSone teaches a data storage medium encoded in an independently operable handheld gaming system. The housing of the PSone is of suitable size and weight for hand held use. A controller is provided (see picture) as

manually operated input. The PSone contains a processor in the housing that executes a game program to generate non sprite graphical rendering and polygon vertex data to represent a character or object in the game in response to manual input. The processor in the PSone digitally renders displayable pixel data from the polygon vertex data from a variable viewing angle. A display is provided. The PSone fails to disclose a self contained electrical power supply. One of ordinary skill in the art would recognize that a self contained power supply is necessary for portable game playing. The PSone suggests to one of ordinary skill in the art a portability in game systems, though correctly pointed out by the applicant, in a car due to increased power availability thereby facilitating processing power necessary for 3D graphics and polygonal rendering. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to incorporate a self contained power supply into the PSone to make the game fully and completely portable to a player.

Claims **353-354, 356-357, 365, 367-370, and 374** are rejected under 35 U.S.C. 103(a) as being unpatentable over PSone in view of Aroyan et al. (US 6,163,313).

The PSone is disclosed to be a portable gaming system as outlined in claim 352 above. PSone is disclosed to have an LCD screen without touchscreen ability. In a similar device, Aroyan et al. disclose a touchscreen for use with standard LCD screens (see column 2 lines 43-51). One of ordinary skill in the art would realize that it is advantageous to provide a screen with a controller on a portable device to enable play without carrying a spare controller. It would be obvious for one of ordinary skill in the art to combine the touchscreen with the PSone to increase portability by not having to carry

a spare controller. In a sense, if a player has the game device, the player has everything needed to play the console without a spare controller as shown in the PSone.

Regarding claim 353, Aroyan et al. discloses the touchscreen senses manually manipulated objects vary selectable directions on the screen (see column 1 lines 5-18). When combined with the PSone, the touchscreen would be used to control the motion of the player controlled object.

Regarding claim 354, Aroyan et al. discloses a touchscreen that senses variable locations of a manually operated physical object (see column 1 lines 5-18). When combined with the PSone, the control of the object would change the varied in response to corresponding motion of the manually operated physical object as is well known in 3D gaming.

Regarding claim 356, the PSone contains operation detecting circuitry on the display screen. As combined with Aroyan et al. the display screen necessarily detects a touched coordinate in the display device to monitor input. The processor in the PSone determines an operation area in the display that is detected, and executes a predetermined process on the polygon data to provide a player with proper display in response to the input.

Regarding claim 357, the PSone contains operation detecting circuitry on the display screen. As combined with Aroyan et al. the display screen necessarily detects a touched coordinate in the display device to monitor input. The processor in the PSone generates data portions for display from respective operation areas on the display

device. The processor determines which area of the screen was touched by the coordinate area detected. The processor executes a predetermined process corresponding to a touched operation area.

Regarding claim 365, The PSone discloses moving a character in a 3 dimensional game space in response to corresponding player input. The PSone fails to disclose two touch sensitive panels. One of ordinary skill in the art would recognize that touch screens would increase functionality by allowing the player a more compact design. It would therefore be obvious to one of ordinary skill in the art to incorporate two touch screens into the PSone for manipulating characters by touching the screen, and manipulating characters by a touch screen as a second control so as not to interfere with a player's view while playing the game.

Regarding claim 367, the PSone teaches a player controlled object is generated in variable directions in game space in response to corresponding motion to that supplied by player input. The PSone does not disclose a touch screen. As combined with Aroyan et al. it is deemed obvious to use a touch screen as player input as described in the rejection of claim 353 above.

Regarding claim 368, the PSone teaches polygons to manipulate a player controlled image on a screen generated in response to corresponding player input. As combined with Aroyan et al. a touch screen is provided as player input to manipulate a player controlled object by manual input.

Regarding claim 369, the PSone discloses a player controlled object rendered from viewing angles in a game space in response to player input. As combined with

Aroyan et al. a touch screen is provided as player input to manipulate a player controlled object.

Regarding claim 370, the PSone discloses changeable viewing angles. The PSone fails to disclose two different display objects. One of ordinary skill in the art would recognize two displays would allow a player to play in competition with another player. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to provide two screens incorporating different viewing angles to allow a player to compete or participate with a second player.

Regarding claim 374, the PSone as combined with Aroyan et al. has a touch screen where motion of a player controlled object is generated in variable directions in the game space in response to corresponding motion of player input in the surface of the touch screen.

Claim **363** is rejected under 35 U.S.C. 103(a) as being unpatentable over the PSone in view of Fujimoto et al. (US 6,238,291)

Regarding claim 363, the PSone discloses a processor that executes a process. The PSone fails to disclose a program storage medium that is able to download data from a separately housed gaming system. In an analogous device, Fujimoto et al. discloses a program storage medium that is able to download data from a separately housed gaming system (see figure 1). One of ordinary skill in the art would realize players would enjoy the ability to continue a game from a console based system on a hand held system when the player had to leave the area of the console based system. It would therefore be obvious to one of ordinary skill in the art at the time of the

invention to allow the player to download a current game to a hand held game to continue playing when the player had to leave the area of the console based game.

Conclusion

The Examiner encourages the applicant to telephone the Examiner if the Applicant believes a call would be helpful in defining patentable material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Banta whose telephone number is (571) 272-1615. The examiner can normally be reached on Monday-Friday 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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TB

Ronald Aeneas

Primary Examiner

4/13/07